



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/511,561

10/15/2004

David J. Chen

LBNL-201-US

4182

24972 7590 03/11/2008
FULBRIGHT & JAWORSKI, LLP
666 FIFTH AVE
NEW YORK, NY 10103-3198

EXAMINER

KIM, YUNSOO

ART UNIT

PAPER NUMBER

1644

MAIL DATE

DELIVERY MODE

03/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,561	Applicant(s) CHEN ET AL.	
	Examiner YUNSOO KIM	Art Unit 1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/5/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/6/07, 1/18/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 46-48 are pending.
2. Applicants' claim for domestic priority under 35. U.S.C.119(e) is acknowledged.

However, the provisional application 60/375,094 which priority is claimed fails to provide adequate written support under 35. U.S.C. 112 for claim 46 of this application. The provisional application does not provide written support for "SEQ ID NO:1" as recited in claim 46. Therefore, the effective filing date of the instant claims is deemed to be 4/21/03.

3. Applicants' IDS filed on 11/6/07 and 1/18/08 have been acknowledged.
4. In light of Applicants' amendments to the specification, the objection to the specification set forth in the office action mailed 9/5/07 has been withdrawn.
5. In light of Applicants' cancellation of claims, the following rejections remain.
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:
A person shall be entitled to a patent unless –
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
7. Claims 46 is rejected under 35 U.S.C. 102(a) as being anticipated by Chan et al. (Genes and Development, 2002, vol. 16, p. 2333-2338, of record).

Chan et al. teach the polyclonal antibody that specifically binds to the amino acid consisting of SEQ ID NO:1 comprising a phosphorylated threonine at 2609 (p. 2337, antibodies). Chan et al. further teach that the T2609 of human DNA-PKcs is an autophosphorylation site (introduction, abstract, in particular) and said antibody does not bind to unphosphorylated T2609 is an inherent property as T2609 is always phosphorylated by the DNA-PK enzyme. Therefore, the reference teachings anticipate the claimed invention.

Art Unit: 1644

Applicants' arguments filed on 12/5/07 have been fully considered but they were not persuasive.

Applicants traversed that the Chan reference is not anticipatory reference as the priority date of the instant application is 4/22/02. Applicants have indicated Example 5 of the 60/375094 application as the support.

However, it is noted that the SEQ ID NO:1 of the instant application consists of the following 14 amino acids "TPMFVETQASQGTC" while the amino acid sequence disclosed in the '094 application consists of the following 13 amino acids "PMFVETQASQGTC". Therefore, the claimed and the referenced sequences are not identical and the '094 application fails to provide clear written support for the claimed subject matter.

Given that the priority is not granted, the Chan reference is a proper anticipatory reference.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (Genes and Development, 2002, vol. 16, p. 2333-2338, of record) in view of U.S. Pat. No. 4,744,982, of record.

The teachings of Chan et al. et al and the evidentiary references have been discussed, supra.

Art Unit: 1644

The Chan et al. reference does not teach human monoclonal antibody.

However, the '982 patent teaches human monoclonal antibody is desired because the human monoclonal antibody avoids the cross reaction of polyclonal antibody and provides precise antibody for rapid diagnosis and endless supply of antibody (col. 1-2, overlapping paragraph, in particular).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to make human monoclonal antibody as taught by the '982 patent with the antibody to DNA-PKcs as taught by Chan et al.

One of ordinary skill in the art at the time the invention was made would have been motivated to do so because the human monoclonal antibody taught by the '982 patent avoids the cross reaction of polyclonal antibody and provides precise antibody for rapid diagnosis and endless supply of antibody.

From the teachings of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of the ordinary in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Applicants' arguments filed on 12/5/07 have been fully considered but they were not persuasive.

Applicants traversed that the Chan reference is not anticipatory reference and the combination of the references is not obvious.

In light of the discussion above in the sections 6-7 of this office action, the Chan reference is a proper anticipatory reference. Therefore, the combination of references remains obvious.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1644

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. No claims are allowable.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUNSOO KIM whose telephone number is (571)272-3176. The examiner can normally be reached on M-F,9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen B. O'Hara can be reached on 571-272-0878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yunsoo Kim

Patent Examiner

Technology Center 1600

February 21, 2008

Application/Control Number: 10/511,561

Page 6

Art Unit: 1644

/Eileen B. O'Hara/

Supervisory Patent Examiner, Art Unit 1644